

## **REMARKS**

Claims 1, 2, 4-11 are pending in the present application. Claims 1, 5, 8 and 10 have been amended. No new matter has been added. Applicant respectfully requests reconsideration of the claims in view of the following remarks.

### **Allowable Subject Matter**

Applicant acknowledges with appreciation the indication that claims 5-9 would be allowable if rewritten or amended to overcome the 112 rejection. In view of the amendments discussed below, it is respectfully submitted that these claims are allowable.

### **Claim Rejections – 35 U.S.C. § 112**

Claims 1-2 and 4-11 are rejected under 35 U.S.C. §112 for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention.

Claims 1, 5 and 10 have been amended to recite that “said multicast address is a result of an AND operation with a multicast address and an address mask” and thus are definite now. Therefore, it is respectfully submitted to withdraw the rejections to claims 1-2 and 4-11 under 35 U.S.C. §112.

### **Claim Rejections – 35 U.S.C. § 103**

Claims 1, 2 and 4 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Hardjono (WO 00/33509, hereinafter “Hardjono”) in view of Furukawa, *et al.* (U.S. Patent Application Publication No. 2002/0196782, hereinafter “Furukawa”). Claims 10 and 11 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Hardjono, in view of

Furukawa, in view of Takahashi (U.S. Patent No. 6,046,989, hereinafter “Takahashi”).

Applicant respectfully traverses these rejections.

The Applicant respectfully submits that claims 1 and 4 are patentable over Hardjono in view of Furukawa because neither Hardjono nor Furukawa discloses or teaches at least the elements that “said multicast source authentication information table contains a corresponding **relationship between multicast source address and multicast address**” and accordingly “said multicast address is a result of AND operation with a multicast address and an address mask” of claim 1. Applicant also respectfully submits that claim 10 and its dependent claim 11 are patentable over Hardjono, Furukawa and Takahashi for similar reasons.

Regarding Hardjono, as indicated by the Examiner, Hardjono does not disclose the table containing a corresponding relationship between the multicast source address and the multicast address and the multicast address is a result of an AND operation on a multicast address and an address mask.

Regarding Furukawa, the Applicant notes that Furukawa does not disclose the above distinguishing elements of Claim 1 either. Here, the Applicant would like to first briefly explain the principle procedure of Furukawa so as to facilitate the understanding of the difference between Furukawa and the presently claimed invention.

Paragraph [0410] of Furukawa as cited in the Office Action relates to Embodiment 5 and Figure 45 of Furukawa. As indicated in paragraph [0404], Embodiment 5 is established for setting entire or part of external address in an internal packet address area. As an application scenario, an external packet 520 defined under IPv4 with an **external source address EA1** and an **external destination address EA2** is converted into an internal packet 523 defined IPv6 with an **internal source address P** and an **internal destination address Q** at the unit 501 according

to an address management table 521. The internal packet 523 is forwarded from the unit 501 having the internal source address P to the unit 502 having the internal destination address Q, and restored to be an external packet 524 at the unit 502. The restored external packet 524 is sent to the unit 512 having the address EA2 (see paragraphs [0406], [0407] and [0412] in conjunction with Figure 45 of Furukawa).

Regarding how to set an external address in an internal packet address area, Furukawa further discloses the following exemplary procedure: 1) the external IP packet 520 examines whether there exists a record of the internal address P given in the table 521; 2) an AND-operation is made on the destination IP address EA2 and the destination IP address mask MK2 and it is examined whether the result of the AND-operation agrees with a destination address EA2x in the first-lined record or a destination address EA3y in the second-lined record in the table 521; 3) an AND-operation is made on the source IP address EA1 and the source IP address mask MK1 and it is determined whether the result of the AND-operation agrees with a destination address EA1x existing in the first-lined record; 4) from the determining result of steps 2) and 3), a destination internal address Q is selected. In this manner, the internal addresses P and Q are fixed for forming an internal packet. (see paragraphs [0407] to [0412] of Furukawa)

From the above principle procedure and the disclosure of paragraphs [0404] to [0412], as well as Figure 45 of Furukawa, Applicant respectfully submits that Furukawa does not disclose that “said multicast source authentication information table contains a corresponding **relationship between multicast source address and multicast address**” and “said multicast address is a result of an AND operation with a multicast address and an address mask” of claim 1.

Firstly, the “destination address” of Furukawa as cited in the Office Action is different from the “multicast address” in Claim 1. Furukawa does disclose that whether **the source IP address EA1 ANDed with source IP address mask MK1x is equal to a destination address EA1x** (see paragraph [0410] of Furukawa). However, from, e.g., paragraphs [0407]-[0411] of the Description and Figure 45, it is apparent that the “destination” as mentioned in the “destination address EA1x” is a destination with respect to the AND operation, but not to a destination of a transmission (or a communication session). Similarly, the “destination address EA2x” and “EA3y” are also destinations with respect to the AND operation, but not to destinations of a transmission. In contrast, it is well known for those skilled in the art that the “multicast address” in the amended Claim 1 refers to the address of the destination of a multicast session. Actually, it is indicated in Furukawa that the destination of the transmission is the unit 512 and the destination address for the transmission is the external destination address EA2 (see Figure 45 and paragraph [0404]). However, table 521 of Furukawa does not disclose a correspondence relationship between the source IP address EA1 and the destination IP address EA2.

Therefore, Furukawa does not disclose or teach the above distinguishing elements of claim 1. Accordingly, Furukawa **cannot** provide motivation to those skilled in the art to incorporate the distinguishing elements of claim 1 into Hardjono to obtain the solution of the amended claim 1.

Moreover, as stated by the Applicant in the response to the previous Office Action, Hardjono aims to provide an apparatus and method for limiting an unauthorized multicast destination from receiving the multicast message, but not as indicated in the present application, for limiting an unauthorized multicast source from sending a multicast message without

restriction. Therefore there **will be no** motivation for those skilled in the art to incorporate the distinguishing elements of claim 1 into Hardjono to obtain the solution of the amended claim 1.

Therefore, the amended claim 1 is non-obvious over Hardjono in view of Furukawa.

Accordingly, claims 2 and 4 which are dependent from claim 1 are also non-obvious over Hardjono in view of Furukawa.

With regard to the amended Claim 10, which contains technical features “said multicast source authentication information tables each contain a corresponding relationship between multicast source address and multicast address” and “said multicast address is a result of an AND operation with a multicast address and an address mask” to the same as the above distinguishing elements of claim 1. In addition to the reasons as stated above for claim 1, the Applicant also notes that this distinguishing technical features of claim 10 are not disclosed by Takahashi either.

Therefore, the Applicant respectfully submits that the amended claim 10 and accordingly its dependent claim 11 are non-obvious over Hardjono in view of Furukawa and Takahashi.

### **Conclusion**

For the above reasons and statements, the Applicant respectfully requests the rejections to claims 1-2, 4 and 10-11 under 35 U.S.C. §103 to be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance be issued.

Should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Ira S. Matsil, Applicant’s attorney, at 972-732-1001 so

that such issues may be resolved as expeditiously as possible. The Commissioner is hereby authorized to charge any fees that are due, or credit any overpayment, to Deposit Account No. 50-1065.

Respectfully submitted,



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9/29/04  
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